DRAFT OF COMMENTS FOR DR. FLETCHER FOR LUBOS KOHOUTEK LUNCHEON December 27, 1973

Thank you John:

(Ladies and) gentlemen and our special guest, Dr. Lubos Kohoutek, I take great pleasure in welcoming you to America and to NASA during the perihelion passage of Comet Kohoutek (1973f). This comet has already become the most well known comet since Comet Halley in 1910, although many have asked whether this great, bright comet can be seen. (I think it will be seen).

Comets, by their unexpected coming and going, their strange and fantastic appearance and their unruly motion in the heavens have impressed the imagination of mankind. The importance of comets may have been exaggerated because of superstition compared to other heavenly bodies, but comets have so far been of very minor importance in astronomical science. Let me say a few words about comets and science, comets and scientists, comets and space research, and comets and the world (at large).

Although treated as an inferior category in the study of the universe, <u>comets</u>, next to the Earth and Sun, <u>may represent</u> the most important class of objects in the history of this and other solar systems. They are the survivors and replicas of an ancient population of small bodies and planetismals from which the present planets originated. Remnants of the original population of planetismals were put into cold storage in the

outer portions of the solar system or ejected into interstellar space. They offer a unique opportunity to study the properties of materials used in making the planets and the sun itself (and perhaps other stars) at the dawn of the solar system.

Comets have recently become interesting to many scientists, although dedicated scientists carrying on research in comets in the United States number less than ten. The appearance of a new apparition; a bright long period comet has made many astronomers aware of the potential scientific return to be expected with the high resolution and extended wavelength of present day instruments.

Let me pay homage to a great solar system astronomer, a cometary astronomer, who organized the last <u>Conference on Comets</u>

(April 8-9, 1970 and published last year), <u>Dr. Gerard P. Kuiper</u>.

Gerard Kuiper died Sunday (Dec. 23) in Mexico City. He carried out excellent observations of Jupiter, Venus, Saturn and Mars at high resolution and in the Infra Red, and did especially superb work mapping the moon and analyzing the Ranger and Lunar Orbit photographs.

Comets are an important area for space research. Aircraft, rockets and satellites can carry scientists and instruments to regions above the atmosphere where extended wavelength observations in the infrared and ultraviolet may be made. The astronauts on Skylab are obtaining photographs and high resolution

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to the visible. They are observing the comet through the perihelion period. Ed Gibson reported on Sunday concerning Comet Kohoutek compared to Mercury - "I could not distinguish one as being much brighter than the other." Mercury is a -0.5 magnitude object. On Monday the commander Gerald Carr reported, "Kohoutek is not looking like our old pretty graceful-looking blue comet anymore. It's getting so close to the sun now that the tail is fanning out. It's very short ... but what I can see behind the comet now, the actual 'coma' is getting quite large and bright ... we're beginning to see some reds and some yellows in it." The EVA on Christmas day was quite successful. The observations of Comet Kohoutek is the prime experimental activity on Skylab through mid January.

Finally, the world is interested in Comet Kohoutek. This comet has become a <u>catalyst</u>, not only to astronomers but to everyone. It has made many aware of beauty and complexity of our solar system and the stars. Kohoutek has become a universal word understood by everyone on Earth; a reminder of great events and great mysteries beyond Earth.

LUNCHEON HONORING DR. KOHOUTEK Thursday, December 27, 1973

Executive Dining Room

Dr. Lubos Kohoutek - Guest of Honor

Dr. John Naugle - Host

Dr. James C. Fletcher

Dr. Homer E. Newell

Dr. Leslie H. Meredith Assistant Director, GSFC

Dr. David D. Elliott National Security Council

Mr. Hugh F. Loweth
Office of Management and Budget

Honorable John L. McLucas Secretary of the Air Force

Mr. Maurice Dubin NASA

Dr. Stephen P. Maran Manager, Operation Kohoutek GSFC

Mr. Charles R. O'Dell MSFC

Mr. Zdenek Sekanina Interpreter Additional Guest for Luncheon Honoring Dr. Kohoutek, Dec. 27, 1973

(requested by Dr. Naugle)

Dr. Robert Fleischer Head Astronomy Section National Science Foundation